Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAN-GIE PARK

Appeal No. 2000-0980
Application 08/763,733

ON BRIEF

Before KRASS, JERRY SMITH and FLEMING, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-14, which constitute all the claims in the application. An amendment after final rejection was filed on March 8, 1999 and was entered by the examiner.

The disclosed invention pertains to a video data decoding method and apparatus for high-speed reproduction for decoding and reproducing digital video data encoded according to a Moving Picture Experts Group (MPEG) standard. More particularly, the invention determines units of picture data which are to be skipped based on predetermined picture size information contained at a user data region of the encoded picture information.

Representative claim 1 is reproduced as follows:

1. A video data decoding apparatus for high-speed reproduction for decoding and reproducing digital video data encoded according to a Moving Picture Experts Group (MPEG) standard and recorded on a recording medium, the video data decoding apparatus comprising:

a microprocessor unit for analyzing input MPEG video data, for judging whether each unit of picture data of said MPEG video data corresponds to a picture which is to be decoded or to be skipped during high-speed reproduction, and for controlling decoding of units of said picture data which are judged to be decoded and skipping reading of units of said picture data which are judged to be skipped based on predetermined picture size information, contained at a user data region corresponding to each of said units of said picture which are judged to be skipped;

a buffer for storing said input MPEG video data; and

decoding means for decoding video data read from said buffer under control of said microprocessor unit.

The examiner relies on the following references:

Iwamura et al. (Iwamura)	5,305,113	Apr. 19, 1994
Okada et al. (Okada)	5,754,241	May 19, 1998 (filed Nov. 14, 1995)

Claims 1, 2, 6-11, 13 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Okada. Claims 3-5[1] and 12 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Okada in view of Iwamura.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before

[1] It is not clear whether the examiner withdrew the final rejection of claim 5 or simply made a typographical error in the statement of the rejection. Appellant has assumed that the examiner intended to maintain the rejection of claim 5 [reply brief, page 3], and we will do the same.

us, that the evidence relied upon supports each of the rejections made by the examiner. Accordingly, we affirm.

We consider first the rejection of claims 1, 2, 6-11, 13 and 14 under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Okada. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). This rejection is argued by appellant in a first group (claims 10, 11, 13 and 14) and a second group (claims 1, 2 and 6-9) [brief, page 3].

The examiner's rejection is set forth on pages 3-7 of the examiner's answer. With respect to the claims of the first group as represented by claim 10, appellant argues that Okada does not disclose the claimed feature of controlling skipping of units of picture data based on predetermined picture size information, corresponding to the units of pictures, contained at a user data

region. Appellant argues that his invention can determine the starting point of the next picture and skip to the start of the next picture, while Okada cannot perform this function [brief, pages 3-4]. The examiner responds that since each of the I, P or B-pictures of Okada have a different data size, and since Okada determines whether the incoming data is an I, P or B-picture, then Okada is determining whether picture data is to be skipped based on picture size information as recited in claim 10. The examiner also responds that the capability of determining the starting point of the next picture and to skip to that picture is not recited in claim 10. Appellant responds that the claimed predetermined picture size information is not the same as an assumed range of picture size information based on picture type as disclosed by Okada [reply brief].

We agree with the position argued by the examiner. Representative claim 10 does not recite the step of skipping to the start of the next picture using detected picture size information. Rather, claim 10 recites skipping units of encoded picture information based on predetermined picture size information. Okada shows in Figure 6 that register 13 sequentially stores the picture headers detected by analyzer 12, and register 14 sequentially stores information on the amount of

data of each picture analyzed by analyzer 12 [column 14, lines 22-28]. We agree with the examiner that the data amount analyzer of Okada constitutes an analysis of predetermined picture size information because each of the I, P and B-pictures have a corresponding known predetermined size range. There is nothing in claim 10 that precludes a range of known predetermined values from representing the picture size information. Therefore, we agree with the examiner's findings. Accordingly, we sustain the examiner's rejection of claims 10, 11, 13 and 14.

With respect to the claims of the second group as represented by claim 1, appellant argues that Okada does not disclose the claimed feature of skipping the reading of units of picture data based on predetermined picture size information, corresponding to the units of pictures, contained at a user data region. Appellant argues that Okada must read out all data until a picture header is detected even if the information is to be skipped [brief, page 4]. The examiner responds that since each of the I, P or B-pictures of Okada have a different data size, and since Okada determines whether the incoming data is an I, P or B-picture, then Okada is determining whether picture data is to be skipped based on picture size information. The examiner also responds that the size determination in Okada determines

whether or not picture data will be read into the decoding circuit. The examiner notes that Okada, therefore, skips reading of data information into the decoding circuit when the data information is to be skipped [answer, page 10]. Appellant reiterates that Okada reads the picture from buffer 2 even when the data is to be skipped [reply brief].

We again agree with the position argued by the examiner. Representative claim 1 broadly recites that a reading of units of picture information is skipped. We agree with the examiner that Okada performs two different types of reading. One reading is into buffer 2 and the second reading is into decoder 4. Although it appears that Okada always performs the first read, Okada only performs the second read when the information is not to be skipped. Thus, Okada discloses skipping a reading of units of picture data when that information is to be skipped. We find this disclosure of Okada sufficient to meet the language of appealed claim 1. Therefore, we sustain the examiner's rejection of claims 1, 2 and 6-9.

We now consider the examiner's rejection of claims 3-5 and 12 under 35 U.S.C. § 103 as being unpatentable over the teachings of Okada and Iwamura. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a

factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of

the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

Appellant groups claims 3-5 together and argues claim 12 separately. Representative claims 3 and 12 recite that the decoding means comprises a variable length decoder, an inverse quantizer and an inverse discrete cosine transformer. The examiner cites Iwamura as teaching that these components are conventionally part of an MPEG decoding means. The examiner finds that it would have been obvious to the artisan for the MPEG decoder of Okada to have these conventional elements. With respect to claims 3 and 12, appellant argues that Iwamura does not overcome the deficiencies of Okada discussed above with respect to claims 1 and 10, respectively. Appellant does not challenge the examiner's finding that Iwamura teaches a decoding means as recited in claims 3 and 12.

Since appellant's only argument of substance is that

Iwamura does not overcome the deficiencies of Okada, and since we found no deficiencies in Okada as discussed above, we sustain the examiner's rejection of claims 3-5 and 12.

In summary, we have sustained each of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-14 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

ERROL A. KRASS Administrative Patent Judge	)	
JERRY SMITH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
MICHAEL R. FLEMING Administrative Patent Judge	)	

JS/ki

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